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Amdt. dated: 10/10/2005  
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#### REMARKS/ARGUMENTS

Upon entry of the instant amendment, claims 1-10 are pending. Claims 1 and 10 have been amended to more particularly point out the Applicant's invention. The Applicant notes with appreciation the Examiner's finding that Claims 1-10 are allowable over the art of record.

#### CLAIM OBJECTIONS

Claim 10 was objected to based upon an informality as set forth in paragraph 2 of the Detailed Action. Claim 10 has been amended to depend on claim 1. Accordingly, this objection should be overcome.

#### CLAIM REJECTIONS - 35 U.S.C. § 112

Claims 1-10 have been rejected under 35 USC § 112, first paragraph, for failing to provide an enabling disclosure. The Applicant concurs with the Examiner that the specification is enabling with respect to the semiphysical model described therein. However, the Examiner alleges that the specification is not enabling for *any* semiphysical model. The Examiner is respectfully requested to reconsider and withdraw this rejection based upon the amendment to claim 1 and the remarks below. In particular, claim 1 now recites modeling the semiconductor device with a semiphysical model *at a predetermined temperature*. Claim 1 also recites *incorporating the thermal properties of the material system of the semiconductor device into the semiphysical model to form a temperature dependent semiphysical model*. It is respectfully submitted that claim 1, as amended, would allow those of ordinary skill in the art to practice the invention. As the Examiner has noted, the references of record, and in particular, the Rein and Ramakrishna references cited by the Examiner, disclose semiconductor semiphysical models which are different from the semiphysical model disclosed in the Applicant's disclosure. These semiphysical models are temperature independent. However, as stated in paragraph [0087] of the Applicant's specification, temperature co-efficient expressions are developed and used to adjust the predictions of the semiphysical model to match the measured DC and small signal data at each temperature, thus incorporating the thermal properties of the material system of the

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semiconductor device into the semiphysical model, as now recited in claim 1. As should be clear, the technique described above can be used with virtually any semiphysical model. For these reasons and all of the above reasons, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-10 and provide favorable consideration of new claim 11.

Respectfully submitted,

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